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EXAMINER KARPINSKI, LUKE E				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/574,219

Applicant(s)

SCHULZ ET AL.

Examiner

LUKE E. KARPINSKI

Art Unit

1616

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46-48, 50-74, 76 and 77 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46-48, 50-74, 76 and 77 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Receipt of arguments and remarks filed 8/27/2010 are acknowledged.

Claims

Claims 1-45, 49, and 75 are canceled.

Claims 46-48, 50-74, 76, and 77 are pending and under consideration in this action.

Rejections

Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue, and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 46-48, 50-61 and 64-74, 76, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over International Publication WO/2003/039505 to Banowski et al. For prosecution US Patent 7,294,330 to Banowski et al. will be used as an English language equivalent.

Applicant Claims

Applicant claims a composition comprising an aluminum antiperspirant compound, an alpha-hydroxycarboxylic acid, specifically mandelic acid, and water, wherein said aluminum compound and said carboxylic acid have a ratio of 15:1 to 1:1.

Applicant further claims aluminum chlorohydrate, ratios and percentages of said components, an O/W microemulsion, a microemulsion gel, said emulsion comprising less than 20% emulsifier and a low volatility oil phase, types of emulsifiers, said composition having a yield point, application to the skin, an antiperspirant comprising a transparent hydrogel, and said formulations as transparent.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Banowski et al. teach antiperspirant compositions comprising an aluminum antiperspirant (col. 15, lines 33-44), an alpha-hydroxycarboxylic acid, including mandelic acid (abstract, col. 2, lines 5-15, and col. 4, line 64), and water (examples), as pertaining to claims 46, 67-69, and 74. Banowski et al. also teach said mandelic acid present at 2% (col. 4, line 61 to col. 5, line 15) and said activated aluminum chlorohydrate present at 10-25% (col. 15, lines 33-61), which reads on an aluminum to carboxylic acid ratio of 5:1 to 12.5:1, as pertaining to claims 46, 50, 51, 69, and 74.

Banowski et al. further teach aluminum chlorohydrate (col. 15, lines 33-44) as pertaining to claims 47, 48, 68, and 74, 1-40% antiperspirant compound (col. 15, lines 51-57), as pertaining to claims 49-54, 69, and 70, 0.001-10% alpha-hydroxycarboxylic acid (col. 5, lines 9-15), as pertaining to claims 49-51, 55, 56, 69, and 70, O/W microemulsions (col. 10, line 45) and gels (col. 10, line 34), as pertaining to claims 57-61 and 71, 0.5-15% emulsifiers (col. 15, lines 29-32) as pertaining to claim 59, oil components with low volatility (col. 12, lines 23-64), as pertaining to claim 60, addition products of ethylene oxide or propylene oxide on linear fatty alcohols, which reads on

polyethoxylated and polypropoxylated emulsifiers (col. 13, line 55 to col. 15, line 1), as pertaining to claims 61 and 63, application to the skin (col. 10, line 24), as pertaining to claim 66, antiperspirant formulations (entire disclosure and examples), as pertaining to claim 72, transparent emulsions, which read on a transparent hydrogel (col. 10, lines 54-55), as pertaining to claim 73, and said formulations as transparent (col. 10, lines 30-55), as pertaining to claims 76 and 77.

Ascertainment of the differences between the prior art and the claims

(MPEP 2141.01)

Banowski et al. do not explicitly disclose an example wherein the claimed components, at the claimed percentages are combined into a single composition. However, Banowski et al. do teach that all of the claimed components may be combined into a composition within the claimed percentage ranges.

Finding of prima facie Obviousness Rational and Motivation

(MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to select each component and combine them as instantly claimed because Banowski et al. suggests that the instant components can be combined or mixed together. In a prior art reference it is not necessary for all of the possible compositions to be exemplified in order for the art to render an invention obvious.

Regarding the ratio limitations, Banowski et al. teach percentage ranges for said components which render the claimed ratios possible.

Regarding the limitation of a low volatility oil component, applicant has not defined what a 'low volatility' is. Therefore the said limitation will be given its broadest interpretation. The disclosure of Banowski et al. teaches low volatility silicones as well as several specific compounds which may be considered having a low volatility.

Regarding the limitations to a yield point, Banowski et al. teach the same compositions which would necessarily have the same properties, including said yield point.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

2. Claims 62 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over International Publication WO/2003/039505 to Banowski et al. in view of US Patent Publication 2002/0077372 to Gers-Barlag et al. For prosecution US Patent 7,294,330 to Banowski et al. will be used as an English language equivalent.

Applicant Claims

Applicant claims are delineated above and incorporated herein.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The teachings of Banowski et al. are delineated above and incorporated herein.

***Ascertainment of the Difference between Scope the Prior Art and the Claims
(MPEP §2141.012)***

Banowski et al. do not teach mixing said compositions and heating to phase transition then cooling, as claimed in claims 62 and 63. This deficiency in Banowski et al. is cured by Gers-Barlag et al. Gers-Barlag et al. teach processes for producing O/W emulsions for deodorant and antiperspirant compositions [44] and [45]. Gers-Barlag et al. also teach that such microemulsions may be produced by mixing the oil phase, water phase, and emulsifier and heating said compositions until phase inversion is met [0072], [0082], and [0099].

***Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)***

Regarding claim 62, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the formulations of Banowski et al. by mixing, heating to phase transition, then cooling, as taught by Gers-Barlag et al. in order to produce the invention of instant claim 62.

One of ordinary skill in the art would have been motivated to do this because Banowski et al. teach compositions in microemulsion form and Gers-Barlag et al. teach processes for the preparation of said emulsions. Therefore it would have been obvious to utilize the process of Gers-Barlag et al., to produce the formulations of Banowski et al.

Regarding claim 63, the presence of said emulsifier reads on this claim due to the fact that applicant is simply describing what an emulsifiers does when mixed with an oil phase and a water phase.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

3. Claims 46-48, 50-56, 64-70, 72-74, 76, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,042,816 to Shen in view of US Patent 5,571,841 to Yu et al.

Applicant Claims

Applicant claims are delineated above and incorporated herein.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Shen teaches compositions comprising enhanced antiperspirant salts, which reads on activated antiperspirants, alpha hydroxycarboxylic acids, and water (col. 4, lines 8-43 and col. 6, lines 45-57), as pertaining to claims 46, 68, and 74. Shen also teaches aluminum to carboxylic acid ratio of 4.2:1 (col. 9, table 2) as pertaining to claims 46, 50, 51, 68, and 74.

Shen further teaches aluminum chlorohydrate (col. 5, line 23 to col. 6, line 12) as pertaining to claims 47, 48, 68, and 74, an antiperspirant to hydroxycarboxylic acid ratio of 6.25:1 (table 2b), as pertaining to claims 49-51 and 69, 18-45% antiperspirant (col. 7, lines 16-51), as pertaining to claims 52-54 and 70, 2-10% hydroxycarboxylic acid (col. 6, line 66 to col. 7, line 3), as pertaining to claims 55, 56, and 70, said formulations in clear gel emulsion form (col. 13, lines 56-62), as pertaining to claims 57-59, 71, and 73, compositions comprising an oil phase, a water phase and less than 20% emulsifier (example 8), as pertaining to claim 59, said oil phase having a low volatility (example 8), as claimed in claim 50, said compositions in antiperspirant formulations for topical application to the skin (col. 4, lines 39-41), as pertaining to claims 66, 72, and 74, and said formulations as transparent (col. 3, lines 61-65 and col. 14, example 8).

***Ascertainment of the Difference between Scope the Prior Art and the Claims
(MPEP §2141.012)***

Shen does not teach mandelic acid as claimed in claims 46, 67, 68, 74, and 75. This deficiency in Shen is cured by Yu et al. Yu et al. teach compositions, including antiperspirants and hydroxycarboxylic acids and that said acids enhance the therapeutic efficacy of actives such as antiperspirants (col. 2, lines 16-30) and specifically recite mandelic acid (col. 3, line 20 and claims).

***Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)***

Regarding claims 46, 67, 68, 74, and 75, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the formulations of Shen with mandelic acid as taught by Yu et al. in order to produce the invention of instant claims 46, 67, 68, 74, and 75.

One of ordinary skill in the art would have been motivated to do this because Shen teaches antiperspirant compositions comprising hydroxycarboxylic acids and Yu et al. teach that alpha-hydroxycarboxylic acids, such as mandelic acid, may be added to antiperspirant formulations to increase efficacy and to reduce skin wrinkles. Therefore it would have been obvious to utilize the mandelic acid of Yu et al., in the formulations of Shen in order to produce a composition with increases efficacy and reduce skin wrinkles.

Regarding the limitation of a yield point, Shen teaches the same formulations comprising the same components and percentages thereof. Therefore, Shen would necessarily have the same yield point as instantly claimed. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the same chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Regarding the limitation of a hydrogel, a hydrogel is viewed to be a gel comprising water. The compositions of Shen comprise water and may be in gel form, therefore these compositions read on hydrogel.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed

invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

4. Claims 57-63 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,042,816 to Shen in view of US Patent 5,571,841 to Yu et al., as applied to claims 46 and 68, in further view of US Patent Publication 2002/0077372 to Gers-Barlag et al.

Applicant Claims

Applicant claims are delineated above and incorporated herein.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The teachings of Shen and Yu et al. are delineated above and incorporated herein.

Ascertainment of the Difference between Scope the Prior Art and the Claims (MPEP §2141.012)

Neither Shen nor Yu et al. teach microemulsions as claimed in claims 57-59 and 71. This deficiency in Shen and Yu et al. is cured by Gers-Barlag et al. Gers-Barlag et al. teach processes for producing O/W emulsions for deodorant and antiperspirant compositions [44] and [45].

Further, neither Shen nor Yu et al. teach percentages of emulsifiers as claimed in claim 59. This deficiency is cured by Gers-Barlag et al. Gers-Barlag et al. teach the utilization of 0.05-10% emulsifier for said emulsions [129].

Further, neither Shen nor Yu et al. teach low volatility oil components within said emulsions as claimed in claim 60. This deficiency is cured by Gers-Barlag et al. Gers-Barlag et al. teach the utilization of vegetable oils, which have a low volatility, for said emulsions [178].

Further, neither Shen nor Yu et al. teach polyethoxylated or polypropoxylated emulsifiers as claimed in claim 61. This deficiency is cured by Gers-Barlag et al. Gers-Barlag et al. teach the utilization of polyethoxylated alcohols as preferred emulsifiers for said emulsions [129].

Further, neither Shen nor Yu et al. teach methods of making said microemulsions as claimed in claims 62. This deficiency in Shen and Yu et al. is cured by Gers-Barlag et al. Gers-Barlag et al. teach that such microemulsions may be produced by mixing the oil phase, water phase, and emulsifier and heating said compositions until phase inversion is met [0072], [0082], and [0099].

Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)

Regarding claims 57-59 and 71, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the combined

compositions of Shen and Yu et al. with microemulsions as taught by Gers-Barlag et al. in order to produce the invention of instant claims 57-59 and 71.

One of ordinary skill in the art would have been motivated to do this because Shen teaches antiperspirant compositions with emulsions and Gers-Barlag et al. teach microemulsions for antiperspirant compositions and methods of producing them. Therefore it would have been obvious to utilize the microemulsions of Gers-Barlag et al., with the formulations of Shen and Yu et al. in order to utilize a microemulsion specifically for antiperspirants.

Regarding the percentage of emulsifier, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the combined compositions of Shen and Yu et al. with less than 20% emulsifier as taught by Gers-Barlag et al. in order to produce the invention of instant claim 59.

One of ordinary skill in the art would have been motivated to do this because Gers-Barlag et al. teach microemulsions for antiperspirant compositions and using less than 20% emulsifier in said formulations. Therefore it would have been obvious to utilize the emulsifier percentages of Gers-Barlag et al., with the formulations of Shen and Yu et al. in order to utilize a known amount of emulsifier.

Regarding the limitation of a low volatility oil component, applicant has not defined what a 'low volatility' is. Therefore the examiner will be reading said limitation in its broadest sense. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the combined compositions of Shen

and Yu et al. with a low volatility oil component as taught by Gers-Barlag et al. in order to produce the invention of instant claim 60.

One of ordinary skill in the art would have been motivated to do this because Gers-Barlag et al. teach producing microemulsions with low volatility oils. Therefore it would have been obvious to utilize the low volatility oils of Gers-Barlag et al., with the formulations of Shen and Yu et al. in order to utilize a known oil type.

Regarding claim 61, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the combined compositions of Shen and Yu et al. with a polyethoxylated alcohol emulsifier as taught by Gers-Barlag et al. in order to produce the invention of instant claim 61.

One of ordinary skill in the art would have been motivated to do this because Gers-Barlag et al. teach the utilization of said emulsifiers in microemulsions for antiperspirant compositions. Therefore it would have been obvious to utilize the polyethoxylated emulsifiers of Gers-Barlag et al., with the formulations of Shen and Yu et al. in order to utilize a known emulsifier for such compositions.

Regarding claim 62, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the combined compositions of Shen and Yu et al. with the processes as taught by Gers-Barlag et al. in order to produce the invention of instant claim 62.

One of ordinary skill in the art would have been motivated to do this because Gers-Barlag et al. teach processes for producing microemulsions for antiperspirant compositions. Therefore it would have been obvious to utilize the processes of Gers-

Barlag et al., with the formulations of Shen and Yu et al. in order to produce a microemulsion known to be used for such formulations.

Regarding claim 63, the presence of said emulsifier reads on this claim due to the fact that applicant is simply describing what an emulsifier does when mixed with an oil phase and a water phase.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant's arguments filed 8/27/2010 have been fully considered but they are not persuasive.

Applicant argues that Banowski et al. teach too many embodiments.

This argument is not found persuasive because Banowski et al. teach a reasonable number of embodiments which are only directed to deodorant and antiperspirant formulations. Banowski et al. also teach hydroxycarboxylic acids as the first beta-glucuronidase inhibiting substance and mandelic acid as the first aromatic carboxylic acid, as well as aluminum chlorohydrate as a preferred antiperspirant salt. Regarding other components, one of skill would have immediately recognized most of

said components as functional equivalents of each other, such as the variety of oils, alcohols, emulsifiers, fragrances, etc.

In KSR, the Supreme Court reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at ___, 82 USPQ2d at 1395. The Supreme Court further stated that: If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.

When considering obviousness of a combination of known elements, the operative question is thus “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.* at ___, 82 USPQ2d at 1396.

Applicant also argues that Banowski et al. does not teach aluminum to carboxylic acid ratios as claimed.

This argument is not found persuasive because Banowski et al. teach percentages of said components and said ratios are found within the preferred ranges of Banowski et al. as delineated above. The modification of percentages of components with a known effect is nothing more than routine optimization, which would be expected of one of ordinary skill in the art.

Applicant also argues that Banowski et al. do not teach any examples comprising an activated aluminum chlorohydrate and an aromatic carboxylic acid.

This argument is not found persuasive because the teachings of Banowski are not limited to the examples.

Applicant also argues that Shen teaches substituted lower alkoenoic acids, preferably having from 2-4 carbon atoms, which excludes mandelic acid.

This argument is not found persuasive because Shen et al. teach preferred acids having 2-4 carbon atoms and do not exclude or teach away from the use of acids with greater than 4 carbon atoms. Further, the teachings of Yu et al. provide the motivation to add mandelic acid to the formulations of Shen and Shen provides no teaching that would lead one to believe said addition would render said formulations inoperable.

Applicant also argues that Shen requires a soluble Ca^{+} salt and that Ca mandelate is only slightly soluble in water.

This argument is not found persuasive because Shen does not require a complex of said Ca and said hydroxyl acid, there is no requirement in Shen that the inclusion of Ca ions and mandelic acid are from the addition of Ca-mandelate.

Conclusion

Claims 46-48, 50-74, 76, and 77 are rejected.

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUKE E. KARPINSKI whose telephone number is (571)270-3501. The examiner can normally be reached on Monday Friday 9-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LEK

/Johann R. Richter/
Supervisory Patent Examiner, Art Unit 1616